

**REMARKS****Summary of the Office Action**

Claims 1-7 stand rejected under U.S.C. §103(a) as being unpatentable over Curry (US 5,710,636) in view of Huttenlocher et al. (US 5,884,014).

The objections to the drawings and Information Disclosure Statement filed on July 31, 2000 have been withdrawn.

**Summary of Response to the Office Action**

Applicant has amended independent claims 1 and 7 to further define the invention and has added new claims 8-20. Accordingly, claims 1-20 are presently pending for consideration.

**All Claims Define Allowable Subject Matter**

Claim 1-7 stand rejected under U.S.C. §103(a) as being unpatentable over Curry (US 5,710,636) in view of Huttenlocher et al. (US 5,884,014). Applicant respectfully traverses the rejections on grounds that it fails to set forth a *prima facie* case of obviousness.

Independent claim 1, as amended, recites an image processing apparatus including, in part, “a configuration of pixels plotted in embedded areas are different from that in ordinary plotting areas.” Similarly, independent claim 7, as amended, recites an image forming medium including “coupling information from hyperdocument data for specifying related information related to the image element is superimposed over at least part of the image element.” Applicant respectfully submits that these features of independent claims 1 and 7 are neither taught nor suggested by Curry and Huttenlocher et al., whether taken singly or combined.

The Office Action admits that “Curry does not disclose expressly that said document data is specifically hyperdocument data, and that said bitmap data is information for specifying related information related to an image element constituting said document image.”

Furthermore, the Office Action admits that “Curry does not disclose expressly that said coupling information is superimposed over an element of image.” Thus, Office Action relies upon Huttenlocher et al. for teaching embedding data that point to an object that also contains data, such as a spread sheet, a web page, or other such embedded objects, and that the objects are related to what is displayed at the portion of the page. As a result, the Office Action alleges that “it would have been obvious to a person of ordinary skill in the art to embed bitmap data in the image as taught by Curry; and embed said bitmap data, which points to an object that also contains data, over a specific portion of the image to which said object relates, as taught by Huttenlocher et al.” The Office Action asserts that a web page is, by definition a hyperdocument, and thus the document data, as taught by Curry, can be stored as hyperdocument data, as taught by Huttenlocher et al. In addition, the Office Action is alleged motivation for doing so “would have been to make a second set of digital information addressable and available for further use, such as distribution, transmission, storage, and internet document display.” Applicant respectfully disagrees.

Applicant respectfully asserts that the Office Action’s alleged motivation to modify Curry (i.e. to embed bitmap data in the image) is neither taught nor suggested by Huttenlocher et al. with respect to an amount of collapsed coupling information due to the image superimposition. Curry discloses an apparatus and method for producing a halftone image generates halftone cells based on grayscale image data and bitmap code. A human readable pattern is embedded within the halftone image (col. 4, lines 44-55, col. 5, lines 38-53). On the other hand, Applicant respectfully submits that coupling information embedded in the image element can be adapted to have an embedded form in non-human readable format (i.e., form style or color style). Furthermore, Applicant respectfully submits that in the present invention,

the coupling information for specifying a related information which undergoes the image superimposition has a minimal image collapse (i.e., appearance of image where the coupling information is embedded preserves a large amount of original appearance), thus providing an easier access for an image processing apparatus to those of related information embedded in the original image element.

In addition, Huttenlocher et al. (Abstract) teaches a processor adapted to perform automatic conversion of a resolution-independent representation of document into a resolution-dependent document representation by lossless compression, which includes a set of tokens and a set of positions identifying a position of token subimage in the particular image collection. However, Huttenlocher et al. is completely silent about the amount of image collapse due to the tokenization of digital information. Tokenized subimage may be available in hyperdocument, however, Huttenlocher et al. does not explicitly disclose that tokenized subimage can be adapted to appear partially on the different subimage and/or original image, whereas the present invention is adapted to embed a unique coupling information over at least the part of original image element. Thus, Applicant respectfully asserts that Curry and Huttenlocher et al. whether taken singly or combination, is completely silent with regard to an image processing apparatus including, at least, “a configuration of pixels plotted in embedded areas are different from that in ordinary plotting areas” and “coupling information from hyperdocument data for specifying related information related to the image element is superimposed over at least part of the image element,” as recited by amended independent claims 1 and 7.

Applicants respectfully note that MPEP 2143.01 instructs that “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention, where there is some teaching, suggestion or motivation to do so found in either

explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” Thus, Applicant respectfully asserts that the Office Action has not provided proper motivation for one of ordinary skill in the art to modify the teachings of Curry with the teachings of Huttenlocher et al. to achieve the invention of independent claims 1 and 7, and hence dependent claims 2-6.

For the above reasons, Applicant respectfully asserts that the rejection under 35 U.S.C. § 103(a) should be withdrawn because Curry and Huttenlocher et al., whether taken individually or in combination, neither teach nor suggest the novel combination of features clearly recited in independent claims 1 and 7, and hence dependent claims 2- 6.

#### **New Claims 8-20**

Applicant has added new claims 8-20. Applicant respectfully submits that new claims 8-20 further define the subject matter of the current invention. Thus, Applicant respectfully requests consideration of newly added claims 8-20.

#### **CONCLUSION**

In view of the foregoing remarks, Applicant respectfully requests reconsideration of this application, withdrawal of all rejections, and the timely allowance of all pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant’s undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310.

If a fee is required for an extension of time under 37 C.R.R. § 1.136 not accounted for above,  
such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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